

## Foods and Supplements that Might Help a Child with a Poorly Balanced Diet

The table below should be read together with the Food Standards Agency's "Eatwell Plate". The plate shows the 5 food groups in recommended proportions. The information below gives you more detail. The emphasis given in this table is the relationship between mood, attention and diet.

Missing Food	Likely Nutrients Needed and Impact if Missing	Sources	Comments
<b>Fruit and vegetables</b>	<b>Magnesium, vitamins A,C, E, folic acid.</b> All of these can affect physical and mental health	Tomato based pasta sauces, soups, pure juice, smoothies and multivitamin supplements	May lack fibre and other "antioxidants" too. A <i>multivitamin</i> supplement may lack magnesium as this is a mineral. Green foods are often high in magnesium.
<b>Fish</b>	<b>Iodine, Selenium, Omega 3 fats.</b> Iodine is needed for brain development and growth. Selenium reduces heart disease and cancer risk. Omega 3 fats may help our mood, sleep and attention and keep our heart and immune system healthy.	Milk products and eggs are rich in Iodine too. Fish and Brasil nuts are good sources of selenium.	Only oily fish is especially rich in omega 3. There may be a case for supplementing with omega 3 even in children who eat fish. All fish is high in Iodine & selenium.
<b>High fibre starchy foods</b>	<b>Fibre.</b> A lack of this contributes to constipation and sometimes to overeating. A diet low in both vegetables and high fibre cereals may be low in Magnesium.	Wholemeal bread, oatcakes, and some breakfast cereals. Fruit, vegetables, beans, nuts and pulses are also good sources	Some gluten free diets are low in fibre. Children who prefer white bread, low fibre cereals and eat little fruit and veg, are most likely to lack fibre.
<b>Dairy</b>	<b>Calcium &amp; Iodine</b> A lack of calcium can increase risk of a bone condition called osteoporosis later in life. Weight bearing exercise reduces this risk. Iodine is important for brain development and growth.	Calcium fortified soya, rice or oat milk, soya yoghurts, tofu, soya "cheese" or a calcium supplement. Milk products, eggs, fish and iodized salt are good iodine sources. Few supplements include Iodine.	Need 2 to 3 servings of milk, cheese or yoghurt a day to get enough calcium. (1 serving is 200mls milk, 30g cheese or 150g yoghurt pot). Vitamin D improves bone health too. Children on milk free diets may be low in iodine.
<b>Red meat</b>	<b>Iron and Zinc.</b> Iron affects mood, energy and attention. Zinc affects digestion, taste perception, and may be important in attention, immune function and sleep.	"Vitamin and mineral" supplements. Shellfish is rich in Zinc too. A high fruit & veg intake improves Iron absorption.	Check level on supplements: Look for at least 50% of requirements. Beef, lamb, offal, pate, black pudding, venison and duck all "count" as red meat. Avoid tea and coffee at meals if red meat intake is poor as it reduces absorption.
<b>Protein and dairy groups</b>	<b>B vitamins.</b> Different B vitamins have different affects. Folate affects mood and risk of cancer and heart disease. B6 and B12 affect mood.	Multivitamin supplements for B vitamins. Meat, fish, milk, eggs, nuts, beans, pulses for protein and some B vitamins.	Lacking both of these groups may mean you are short of protein which you cannot get from supplements
<b>Sunlight</b>	<b>Vitamin D</b> – this may affect mood, immune function, inflammatory disorders, cancer risk and bone health.	Sunlight, oily fish and vitamin D supplement	Need high dose is Scotland due to lack of sunlight. Need to build up levels in summer.

In addition to the information above, also remember that a **high sugar diet, skipping meals, and some food additives**, are also likely to worsen physical or mental health.

(Information sheets on "sugar", "Food additives", "Children's Food, Mood, Behaviour and Learning", "Fish oil", "Gluten and casein free diets", "Diet and ADHD" and "Zinc" are also available).